

# SEVERE WEATHER PREPAREDNESS WEEK



## National Weather Service



### March 24-30, 2013

**Governor Mike Pence** has proclaimed March 24th through 30th, 2013 as *Severe Weather Preparedness Week in Indiana*. The National Weather Service, in conjunction with the Indiana State Police and Public Safety Commission, Indiana Department of Homeland Security, Department of Education, the Indiana Broadcaster's Association, the Red Cross, and Amateur Radio Operators will conduct a statewide test of communication systems on Wednesday, March 27 at 10:15 A.M. and 7:35 P.M. EDT. *If weather postpones the tests, make-up tests are Thursday, March 28 at the same times listed.*

The goal of Severe Weather Preparedness Week is to better educate people about the hazards of severe thunderstorms and tornadoes, and to help everyone be prepared should severe weather occur.

This packet contains information about severe weather terms, safety rules, and some tornado events that affected Indiana. Daily statements will be issued on newswires and NOAA All Hazards Radio during the week. Your local National Weather Service office and our partners are available for interviews.

#### SPRING 2013

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# Preparedness Week Daily Focus




#### OTHER DATES TO NOTE

- \* **National Flood Safety Preparedness Week**  
March 18-22, 2013  
[www.weather.gov/floodsafety](http://www.weather.gov/floodsafety)
- \* **National Safe Boating Week**  
May 18-24, 2013  
[www.safeboatingcouncil.org](http://www.safeboatingcouncil.org)
- \* **Lightning Safety Week**  
June 23-29, 2013  
[www.lightningsafety.noaa.gov](http://www.lightningsafety.noaa.gov)
- \* **Winter Weather Preparedness Week for Indiana**  
November 17-23, 2013

- Sunday, March 24:** **Kick-off;** Discuss roles in severe weather: Yours, NWS, Media, Emergency Response Officials, Homeland Security, Red Cross.
- Monday, March 25:** **Severe Weather Outlook;** Everyone's roles at the Outlook stage of an event
- Tuesday, March 26:** **Watch;** Everyone's roles at the Watch stage
- Wednesday, March 27:** **Warning;** Everyone's role in Warnings; emphasize statewide tornado drill as time to practice plans.
- Thursday, March 28:** **Response;** Everyone's roles in responding to disasters (real-time response)
- Friday, March 29:** **Recovery;** Everyone's roles in the recovery process (days/weeks/months) after disaster
- Saturday, March 30:** **Wrap-up;** importance of preparedness and action during threatening hazards.

**Graphical Weather Briefings are available as "Top News of the Day" at the top of NWS homepages whenever significant weather or flood hazards may occur.**

# TORNADOES

-  **Indiana set a record in 2011 for tornadoes with 72. The annual average is 21. The 2012 Henryville tornado was the first killer tornado since Evansville in 2005.**
-  **The average forward speed is 30 mph but varies from 0 to 70 mph. The average tornado width is about 100 yards but can reach one mile wide.**
-  **Tornadoes occur year round but are most likely from April to June. Preferred hours are from 3 p.m. to 8 p.m. with a second peak from 12 a.m. to 3 a.m.**

## TORNADO SAFETY

### IN HOMES OR SMALL BUILDINGS:

Go to the basement (if available) or to an interior room on the lowest floor, such as a closet or bathroom. Wrap yourself in overcoats or blankets to protect yourself from flying debris.

### IN SCHOOLS, HOSPITALS, FACTORIES, OR SHOPPING CENTERS:

Go to interior rooms and halls on the lowest floor. Stay away from glass enclosed places or areas with wide-span roofs such as auditoriums and warehouses. Follow the instructions of the facility safety officials.

### IN HIGH-RISE BUILDINGS:

Go to interior small rooms or halls. Stay away from exterior walls or glassy areas.

### IN CARS OR MOBILE HOMES:

Most tornado deaths occur in cars and mobile homes. If you are in either of those locations, and have time, leave them for a substantial structure or designated tornado shelter.

### IF NO SUITABLE STRUCTURE IS NEARBY:

Lie flat in your car or nearest ditch and use your hands to cover your head.

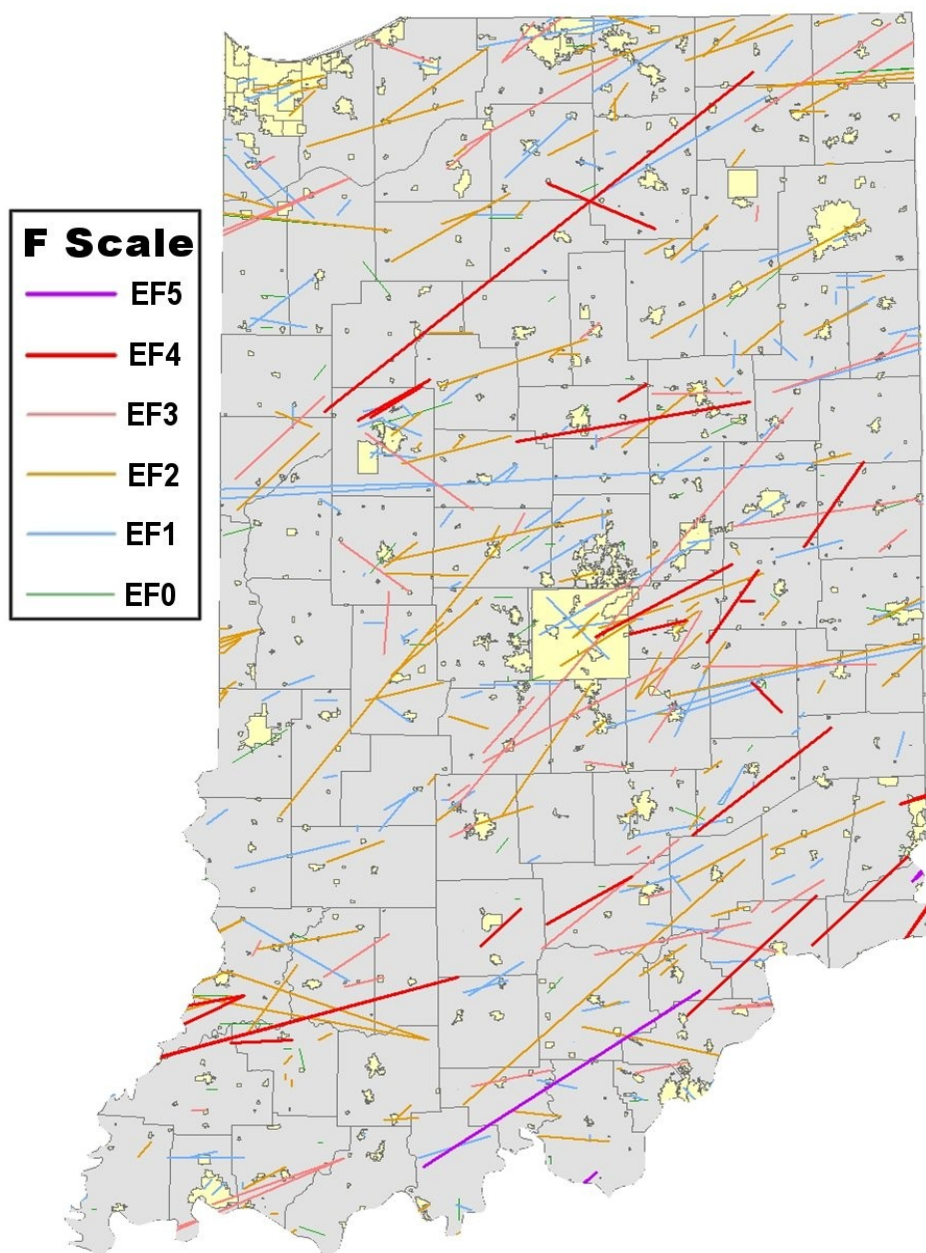


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This map depicts historical tornado tracks in the state of Indiana. To see a full color version of this map included in the newsletter, go to our web site at <http://www.weather.gov/ind/>  
2012 U.S. Tornadoes: <http://www.spc.noaa.gov/wcm/#2012>



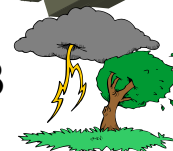
## Indiana Tornado Tracks 1950-2005



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# Lightning Safety!



**LIGHTNING SAFETY WEEK JUNE 22-29, 2013**

[www.lightningsafety.noaa.gov](http://www.lightningsafety.noaa.gov)

All thunderstorms produce lightning and are dangerous. Lightning kills more people each year than tornadoes.

Lightning can strike as far as 10 miles away from any rainfall. Many deaths from lightning occur ahead of the storm because people wait to the last minute before seeking shelter. **You are in danger from lightning if you can hear thunder.** If you can hear thunder, lightning is close enough that it could strike your location at any moment. Get inside! **"When thunder roars go indoors!"**

Lightning injuries can lead to permanent disabilities or death. On average, 10% of strike victims die; 70% of survivors suffer serious long term effects.

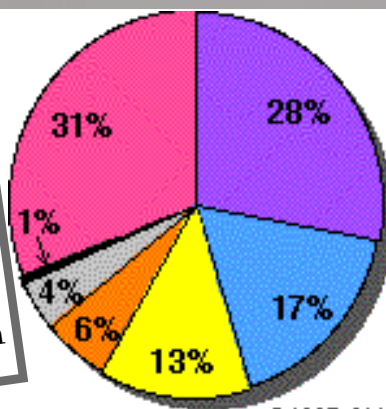
**Blue Skies and Lightning.** Lightning can travel sideways for up to 10 miles. Even when the sky looks blue and clear, be cautious. If you hear thunder, take cover. At least 10% of lightning occurs without visible clouds overhead in the sky.

- ~ **Inside a building with wiring or plumbing is safest. Inside a hard-topped vehicle is safer than outside but avoid contact with metal or outside parts of the vehicle.**
- ~ **If you can't get to a shelter, stay away from trees or open areas where you may be the tallest object.**
- ~ **Avoid metal! Avoid leaning against vehicles. Get off bicycles and motorcycles. Don't hold on to metal items such golf clubs, fishing rods, tennis rackets or tools.**
- ~ **Get out of the water, it's a great conductor of electricity. Don't stand in puddles of water, even if wearing rubber boots.**
- ~ **Move away from a group of people. Stay several yards away from other people. Don't share a bleacher bench or huddle in a group.**

## Lightning deaths

25 million cloud-to-ground lightning strikes occur in the United States each year

Lightning can heat its path five times hotter than the surface of the sun



- Near telephone poles
- On golf courses
- Near heavy equipment
- On or near bodies of water
- Under trees
- In fields or ballparks
- Other—includes riding a bike, mowing the lawn, talking on the phone, and climbing mountains

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## SEVERE WEATHER PREPAREDNESS WEEK

# SEVERE WEATHER TERMS AND DEFINITIONS

**Warning** - A weather hazard is imminent or reported and requires **immediate action** to protect life and property.

**Watch** - Hazardous weather may occur. **Watch for information; review safety plans..**

**Severe Thunderstorm** - A thunderstorm that produces tornadoes, hail one inch or more in diameter, or winds of 50 knots (58 mph) or more.

**Moderate Risk** (of severe thunderstorms) - Severe thunderstorms are expected to affect between 5 and 10 percent of the area. A moderate risk indicates the possibility of a significant severe weather episode. A Watch will likely be issued.

**High Risk** (of severe thunderstorms) - Severe weather is expected to affect more than 10 percent of the area. A **high risk** is rare, and implies an unusually dangerous situation and usually the possibility of a major severe weather outbreak.

**Cold-air Funnel** - A funnel developing from a small shower or thunderstorm, most prevalent on a cool autumn day.

**Derecho** - A long lived, large thunderstorm squall line producing widespread tornado-like damage in multiple states.



## Be Red Cross Ready



### Emergency Preparedness Kit for your home

- ★ Food and water for 3 days (1 gallon of water per person per day)
- ★ Flashlights and extra batteries
- ★ Battery-powered or hand-crank radio (NOAA Weather Radio, if possible)
- ★ First aid kit
- ★ Medications (7-day supply) and medical items
- ★ Multi-purpose tool
- ★ Sanitation and personal hygiene items
- ★ Copies of personal documents
- ★ Cell phone contact information
- ★ Extra cash



## Did You Know?

Special needs NOAA Weather Radios designed to meet the needs of the hearing impaired are available.

For more information, visit: <http://www.nws.noaa.gov/nwr> For Special Needs NOAA Weather Radio information, visit: <http://www.nssl.noaa.gov/edu/safety/specialneeds.html>

**NOAA All Hazards Radio**  
Keep ahead of the storm by listening to NOAA Weather Radio for the latest weather watches, warnings, and advisories. The Specific Area Message Encoding (SAME) feature of NOAA Weather Radio activates the Emergency Alert System (EAS). EAS is used to provide notification of emergencies to the public.

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# Wireless Emergency Alerts

Many smart phones now carry tornado warnings wherever you are in the country.



## Wireless Emergency Alerts

National Weather Service tornado warnings, and other alerts, are now carried on many smart phones as **Wireless Emergency Alerts (WEA)**. The alert will carry a distinct vibration and audio signal as well as carry a visual message to seek further information. Where ever you are in the country, if you are in range of a warning, you will receive it. Check your local cell carrier for WEA capable service and models.

See: <http://www.nws.noaa.gov/com/weatherreadynation/wea.html>

## HEAT WAVE

### *How can I be prepared and stay safe?*

- Wear light clothes, sunglasses and a hat to protect yourself from the sun.
- Drink plenty of water at all times, even if you do not feel thirsty.
- Do not overexert yourself.
- Eat light meals.
- Stay out of the sun when possible.

### Relative Humidity (%)

°F	40	45	50	55	60	65	70	75	80	85	90	95	100	Heat Index (Apparent Temperature)	With Prolonged Exposure and/or Physical Activity
110	136														Extreme Danger
108	130	137													Heat stroke or sun stroke highly likely
106	124	130	137												Danger
104	119	124	131	137											Sunstroke, muscle cramps and/or heat exhaustion likely
102	114	119	124	130	137										Extreme Caution
100	109	114	118	124	129	136									Sunstroke, muscle cramps and/or heat exhaustion likely
98	105	109	113	117	123	126	134								Caution
96	101	104	108	112	116	121	126	132							Fatigue possible
94	97	100	103	106	110	114	119	124	129	135					
92	94	96	99	101	105	108	112	116	121	126	131				
90	91	93	95	97	100	103	106	109	113	117	122	127	132		
88	88	89	91	93	95	98	100	103	106	110	113	117	121		
86	85	87	88	89	91	93	95	97	100	102	105	108	112		
84	83	84	85	86	88	89	90	92	94	96	98	100	103		
82	81	82	83	84	84	85	86	88	89	90	91	93	95		
80	80	80	81	81	82	82	83	84	84	85	86	86	87		

### Remember?

2012 was on of the hot-test and driest summers of record in Indiana!

In 2006, 253 deaths nationwide were from heat



## SEVERE WEATHER PREPAREDNESS WEEK



late surface  
ping/

**Skywarn Storm Spotter training** is also conducted each spring to help folks better understand signs for severe weather and report storm information to the National Weather Service. See your local NWS office home page for storm spotter talks in your area.

## Weather Enthusiasts Wanted!

Volunteers may join the **CoCoRaHS** network, a non-profit community based network of volunteer weather observers to report daily rainfall (hail and snow). See <http://www.cocorahs.org>

The **PING Project** also is looking for volunteers to report precipitation to the National Severe Storms Laboratory. Reports are plotted on a national map. The data helps NWS Forecasters relate surface observations to what is detected by NWS Doppler radar. See: <http://www.nssl.noaa.gov/projects/ping/>

## Flood and Flash Flood Information

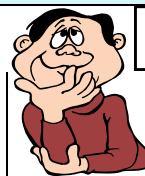
### CHECK OUT THE ADVANCED HYDROLOGIC PREDICTION SERVICE (AHPS)

AHPS is a great tool to check out the latest in river flood information. Information on flood stage, flood impacts and any current flood warnings or statements is available for each station on the map. If you live or work near a river or stream, this page will be of great help to you! <http://water.weather.gov/ahps/>

### FLOOD AND FLASH FLOOD SAFETY TIPS

- Monitor NOAA All Hazards Radio or your favorite news source for vital weather information.
- If flooding occurs, get to higher ground, away from areas subject to flooding.
- Avoid areas already flooded and do not attempt to cross flowing streams.
- Do not drive around barriers that warn you the road is flooded. **Some cities and counties will issue a fine to motorists who ignore barriers!**
- Never drive through flooded roadways as road beds may be washed out under flood waters.
- If your vehicle is suddenly caught in rising water, leave it immediately and seek higher ground.
- Do not camp or park your vehicle along streams and washes, if there is a threat of flooding. Be especially cautious at night when it is harder to recognize flood dangers.

### FLOOD FACTS



#### According to FEMA:

The average annual U.S. flood losses from 1996-2005 was more than \$2.4 billion.

Hurricanes Sandy: \$1.24B in assistance; 500,000+ assistance registrations; 4000+ personnel deployed.

In 2008, major spring, summer and fall floods resulted in FEMA Disaster Declarations for most Indiana counties.

March 18-22, 2013

Flood Safety Week

[www.weather.gov/floodsafety](http://www.weather.gov/floodsafety)

## CRITICAL NWS FLOOD PRODUCTS

**Hydrologic Outlook:** This product alerts the public when flood producing rainfall is expected in 36 to 72 hours. During the months of February and March, this product also contains information on the potential for flooding from the spring snow melt.

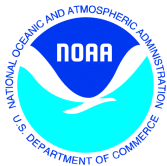
**Flood Watch:** A flood or flash flood watch is issued when conditions are favorable for flooding or flash flooding to develop.

**Flash Flood Warning:** A warning is issued when rapid flooding is imminent. Flash floods quickly develop within six hours of a heavy rainfall event.

**Urban/Small Stream Flood Advisory (issued as a Flood Statement):** These statements are issued when minor flooding problems are expected, mostly in flood prone urban areas or near small streams that may rise quickly out of their banks. Even minor flooding can cause huge problems if proper precautions are not taken.

**Flood Warning:** These warnings are issued for river floods or for widespread flooding across a county. River flooding mostly occurs with longer periods of rain which result in slower rises in flood waters and a prolonged flood event.

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